

REPORT ON THE MINERAL EXPLORATION  
IN THE HOMA BAY AREA  
REPUBLIC OF KENYA

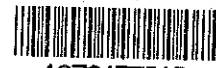
PLATE II

MARCH 1969

JAPAN INTERNATIONAL COOPERATION AGENCY  
METAL MINING AGENCY OF JAPAN



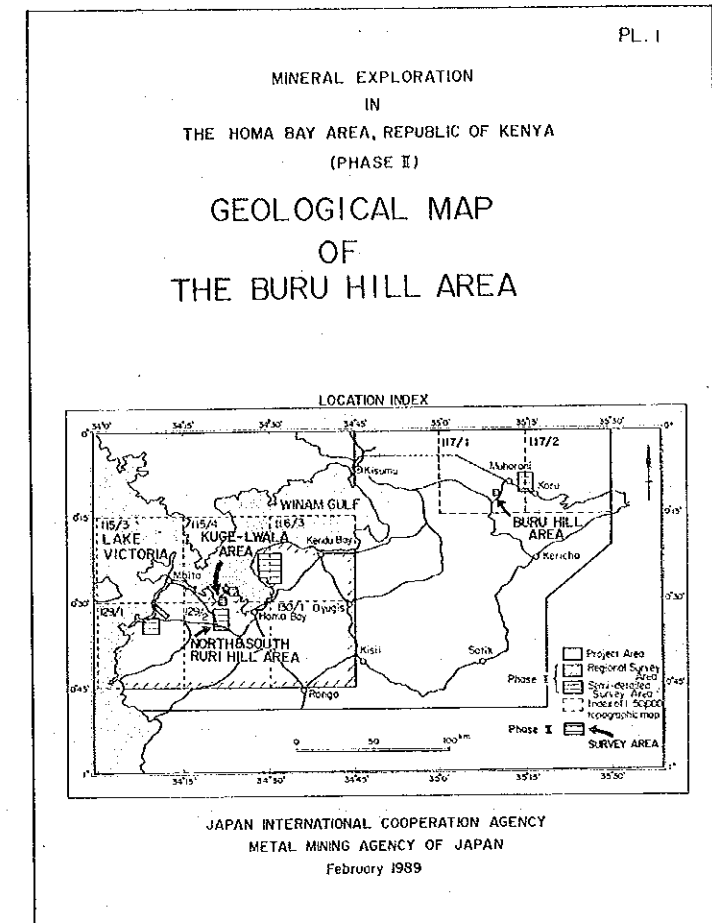
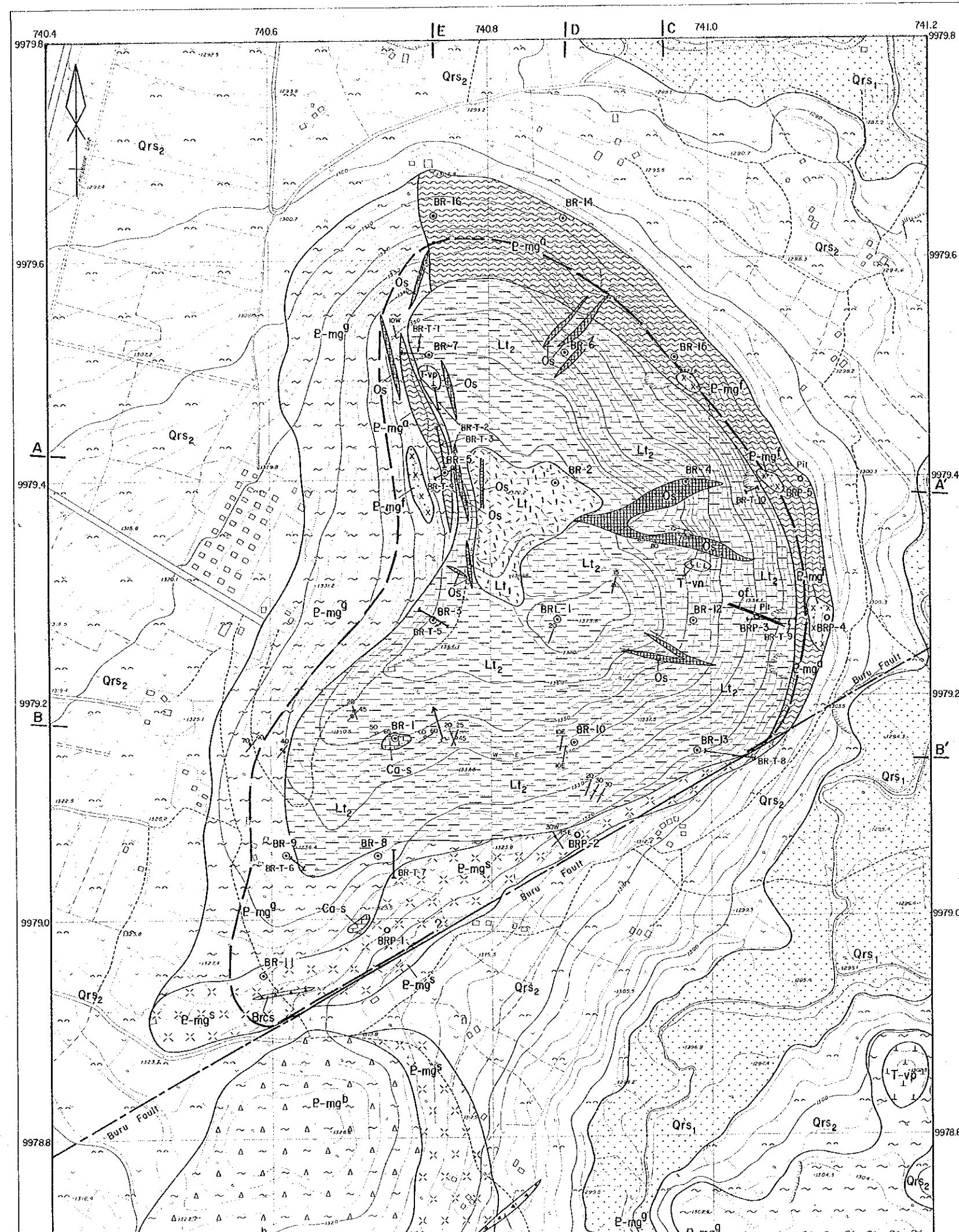
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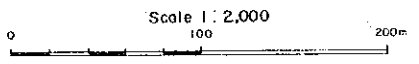
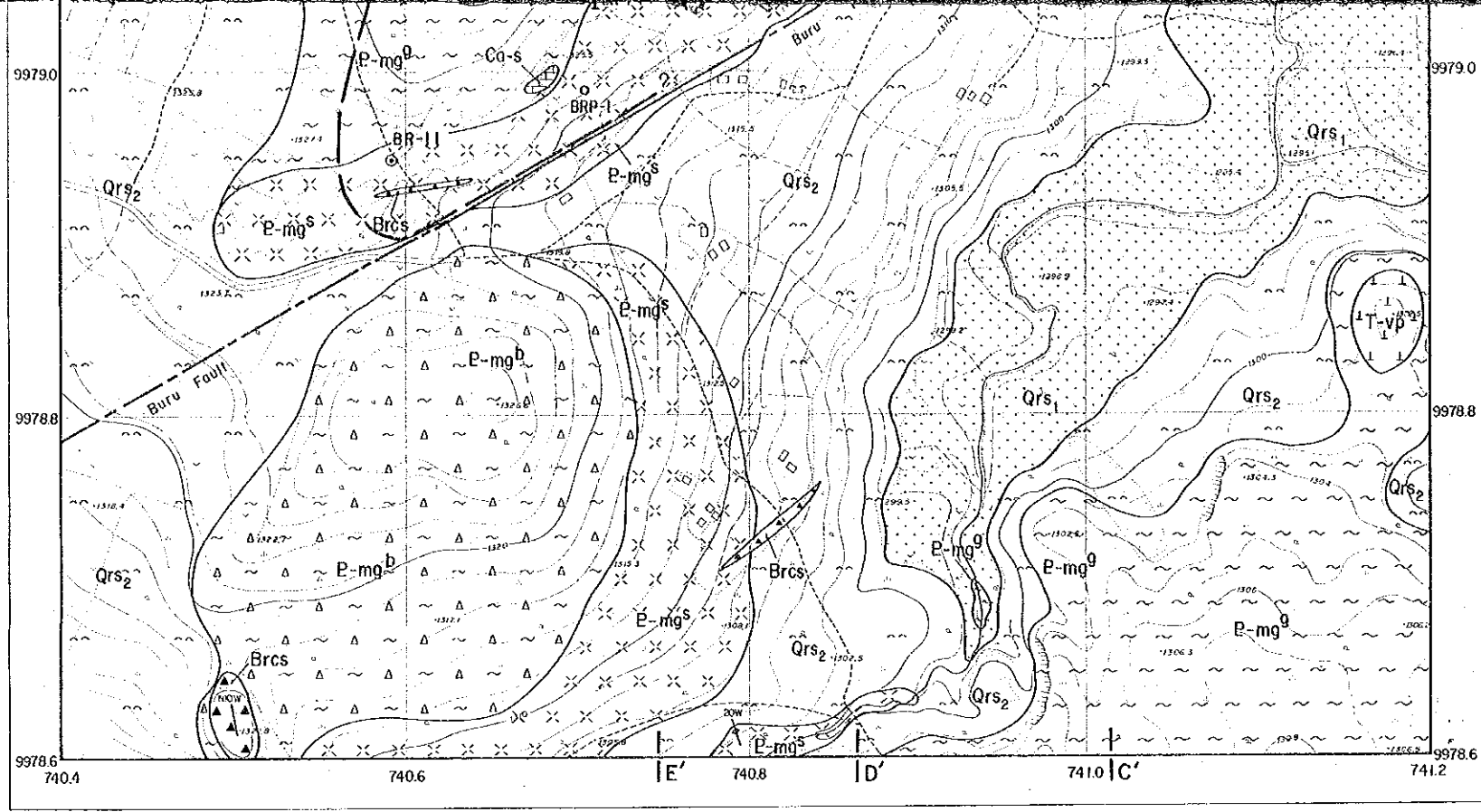
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Scale 1:2,000

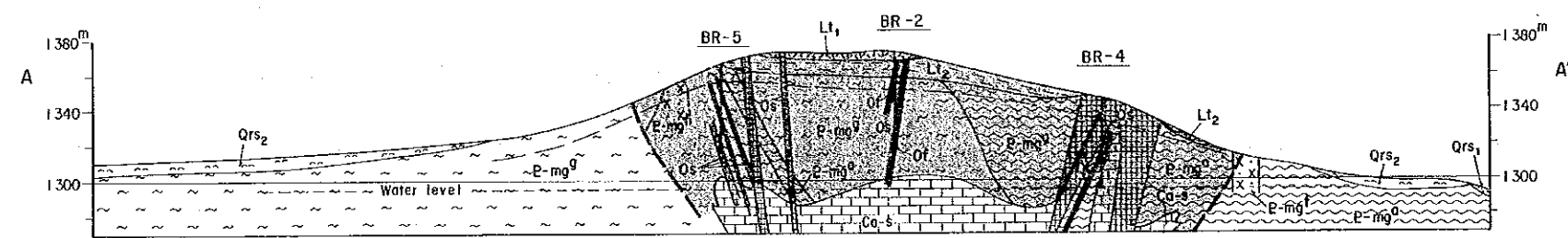
**LEGEND**

- Qrs<sub>1</sub> Alluvium
- Qrs<sub>2</sub> Colluvial deposits
- Lt<sub>1</sub> Laterite (hard crust)
- Lt<sub>2</sub> Laterite and earthy rock, mineralized
- T-vp Phonolite
- T-vn Nephelinite, Melanephelinite
- Os Siliceous ore (dyke, vein)
- Of Ferruginous ore (vein)
- Cf Ferrocyanotite
- Ca-s Carbonatite (alvikite, sövite)
- Brcs Siliceous breccia (dyke, plug)
- P-mg<sup>a</sup> Fertilized rock (original rock : gneiss or intrusive rock)
- P-mg<sup>b</sup> Brecciated, silicified gneiss
- P-mg<sup>c</sup> Sheared gneiss
- P-mg<sup>d</sup> Granitoid gneiss
- P-mg<sup>e</sup> Amphibole gneiss, amphibole bearing gneiss
- Mineralized zone (Plane)
- Mineralized basement zone (Section)
- Strike and dip of foliation
- Strike and dip of vein

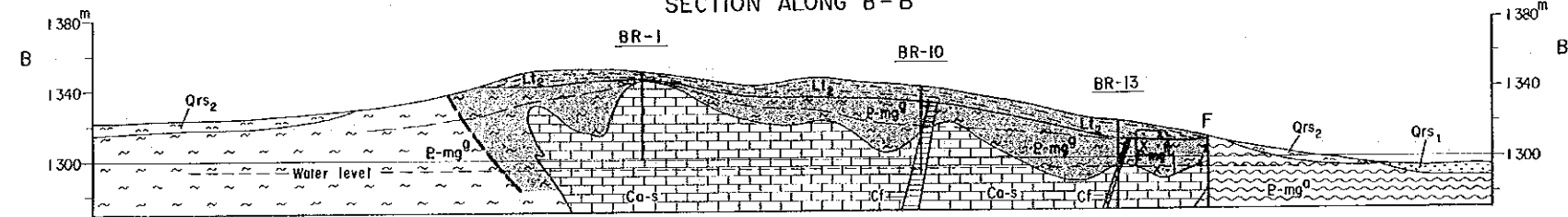


- Os Siliceous ore (dyke, vein)
- Of Ferruginous ore (vein)
- Cf Ferrocyanite
- Ca-s Carbonatite (alvikite, sövite)
- Brcs Siliceous breccia (dyke, plug)
- E-mg Fertilized rock (original rock: gneiss or intrusive rock)
- E-mg Brecciated, silicified gneiss
- E-mg Sheared gneiss
- E-mg Granitoid gneiss
- E-mg Amphibole gneiss, amphibole bearing gneiss
- Mineralized zone (Plane)
- Mineralized basement zone (Section)
- Strike and dip of foliation
- Strike and dip of vein
- Fault: existing, inferred (UP)
- Fault: concealed (low)
- Water level
- Lower limit of strongly weathered zone
- BR- BRL- Location of DDH site (BRL-1, BR-1 to BR-16)
- BR-P- Location of Pit (BR-P-1 to BR-P-5)
- BR-T- Location of Trench (BR-T-1 to BR-T-10)
- Portal (inclined shaft)
- Line of section

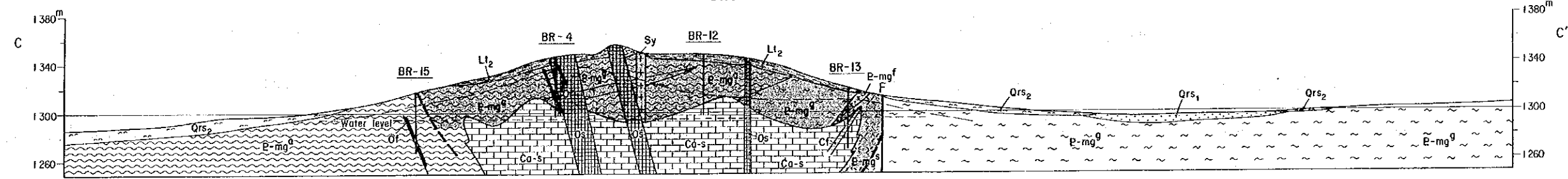
SECTION ALONG A-A'



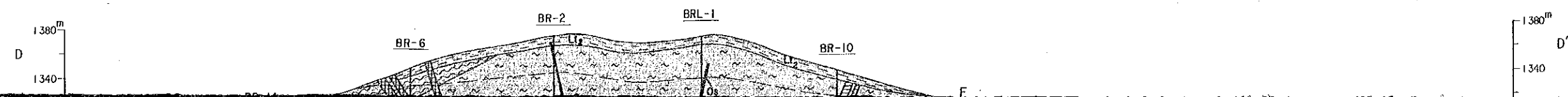
SECTION ALONG B-B'



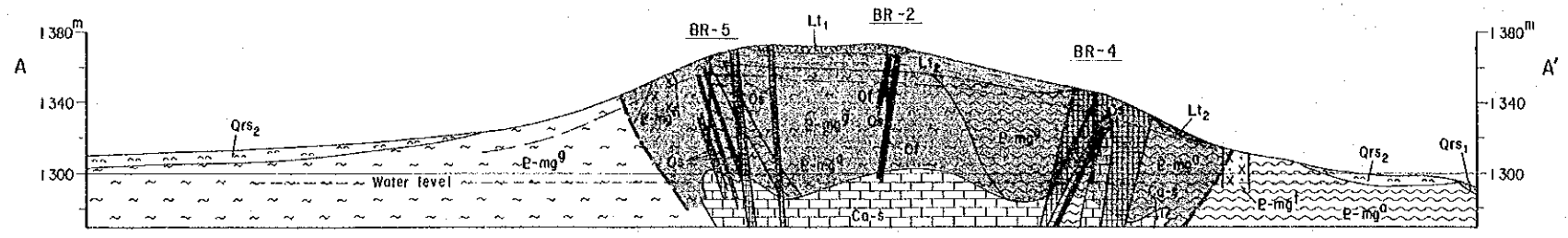
SECTION ALONG C-C'



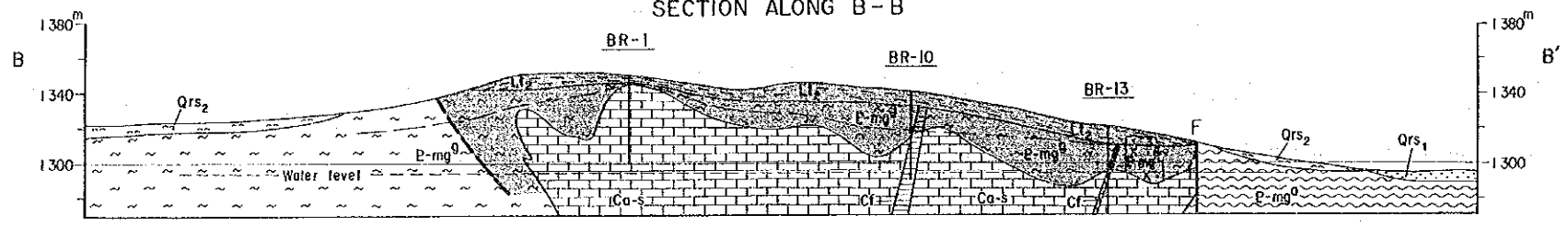
SECTION ALONG D-D'



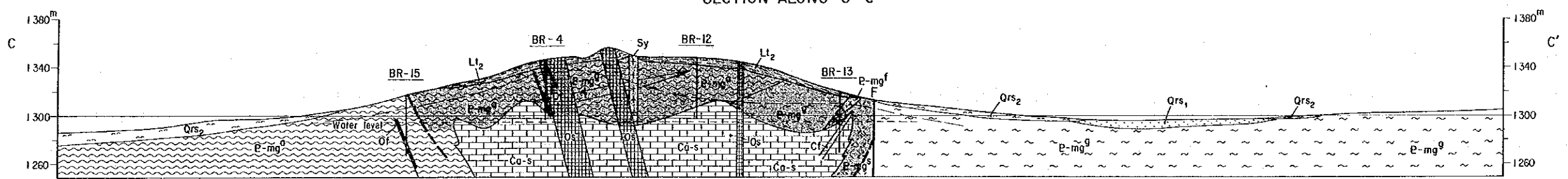
SECTION ALONG A-A'



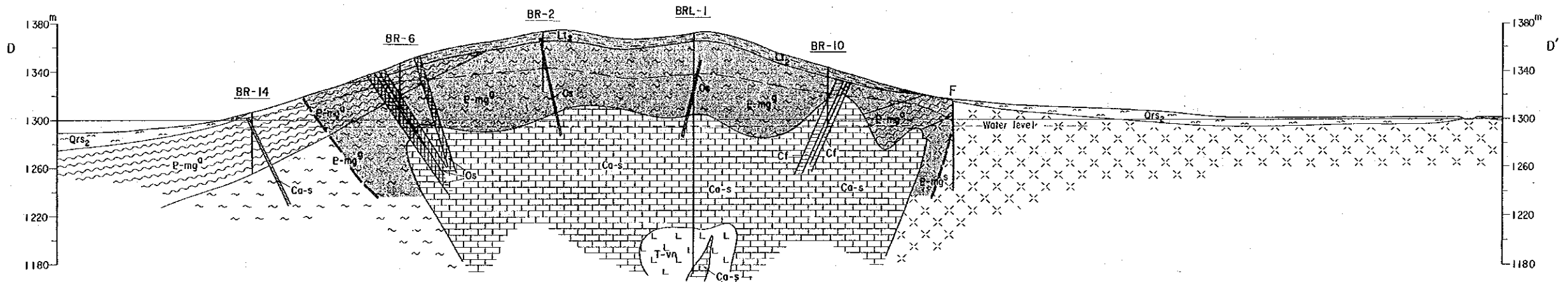
SECTION ALONG B-B'



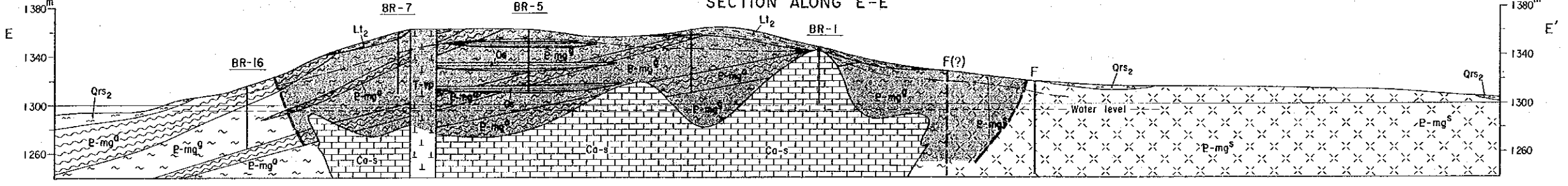
SECTION ALONG C-C'



SECTION ALONG D-D'



SECTION ALONG E-E'



DDH No. BRL-1  
0-50 m

LOCATION { X : E740.860  
(UTM GRID) Y : N9,979.271  
ELEVATION : 1,373.0 m

BEARING :  
INCLINATION : - 90°  
LENGTH : 200.10 m

DEPTH (m)	GEOLOGIC COLUMN	BOUNDARY DEPTH(m) and CORE ANGLE (°)	GEOLOGICAL DESCRIPTION	WEATHERING	REACTION to H <sub>2</sub> O <sub>2</sub>	MAGNETIC TEST	VEIN	POSITION of TESTED SAMPLES	ANALYTICAL RESULTS																COMBINED La, Ce and Nd CONTENTS (%)	CORE RECOVERY	DEPTH (m)
									SAMPLE No.	DEPTH and WIDTH (m)	Au (g/t)	Ba (%)	Sr (ppm)	Nb (ppm)	Y (ppm)	U (ppm)	Th (ppm)	La (%)	Ce (%)	Nd (%)	Sm (ppm)	Eu (ppm)	Tb (ppm)	Yb (ppm)			
0		1.40	weathered porous lateritic overburden	S	-	-		BRL-1-01	0.80	<0.07	1.67	950	3650	520	57	805	0.190	0.34	0.13	176.9	54.9	23.4	28.2	4.6	0.66		0
		1.80	light grey fragments of gneiss	S	-	-																					
		4.80	strongly weathered porous lateritic rock with fragments of gneiss and iron-oxide veins	S	-	-	C	BRL-1-02	(3.00)	<0.07	2.43	800	2350	850	73	982	0.420	0.75	0.23	234.6	67.2	27.7	51.0	8.1	1.40		
5		4.80	light grey to brown weathered gneiss, strongly stained by ferric-oxide	S	-	-	C	BRL-1-03	(3.90)	<0.07	4.46	2100	2400	790	255	723	0.970	1.28	0.32	273.8	69.4	26.1	46.8	8.4	2.57		
		8.70	reddish brown, strongly weathered gneiss	S	-	-	C	BRL-1-04	8.70 (1.50)	<0.07	10.20	1250	1100	680	346	1438	2.120	2.11	0.50	354.2	106.2	32.8	32.3	5.6	4.73		
10		10.00	greyish brown, partly reddish brown weathered gneiss	S	-	-	C	BRL-1-05	(2.05)	<0.07	7.57	1950	1900	560	382	895	1.920	2.15	0.48	307.7	79.1	21.1	21.3	4.9	4.55		
		12.05	orange brown, iron-oxide networked and spotted weathered gneiss	S	-	-	A	BRL-1-06	(2.95)	<0.07	3.86	1400	690	550	201	1314	0.960	1.18	0.31	326.4	84.8	25.5	18.8	3.9	2.45		
15		15.00	dark grey, weathered earthy gneiss	S	-	-	C	BRL-1-07	15.00 (1.50)	<0.07	4.66	1800	820	510	265	1375	0.920	1.17	0.34	320.4	79.4	21.7	25.1	3.9	2.43		
		16.50	strongly veinletted gneiss	S	-	-	A	BRL-1-08	16.50 (0.30)	<0.07	4.80	1500	590	740	381	1277	1.420	1.63	0.38	344.9	88.4	31.8	32.9	5.9	3.43		
		16.80	dark grey weathered gneiss, weakly stained by ferric oxide	S	-	-	C	BRL-1-09	(4.00)	<0.07	6.25	2250	890	720	429	1338	1.910	2.06	0.45	336.9	92.6	30.2	36.3	6.1	4.42		
20		20.80	dark grey to reddish brown weathered gneiss, strongly stained by ferric-oxide	S	-	-	A	BRL-1-10	20.80 (1.65)	<0.07	6.38	1800	890	830	357	2025	2.310	2.44	0.54	422.0	113.0	38.2	31.9	5.2	5.29		
		22.45	light grey to dark grey fractured (by iron-oxide veinlets) gneiss	S	-	-	A	BRL-1-11	(4.30)	<0.07	5.22	2100	670	1100	362	1677	1.800	1.93	0.41	362.8	100.7	36.2	47.3	8.7	4.14		
25		26.75	orange brown weathered gneiss, orange brown silicious veinlets and black iron-oxide veinlets predominant	S	-	-	A	BRL-1-12	(2.75)	<0.07	3.77	1000	240	560	246	1627	1.170	1.24	0.35	419.7	101.5	27.6	31.8	5.7	2.76		
30		29.50	same as above; (sampling boundary)	S	-	-	A	BRL-1-13	(2.80)	<0.07	6.05	1500	1300	810	220	1212	0.930	1.02	0.26	279.0	78.0	25.7	34.6	6.5	2.21		
		32.30	grey brecciated gneiss	S	-	-	R																				
		32.80	brownish grey strongly weathered, somewhat earthy, iron-oxide	S	-	-	C	BRL-1-14	(3.20)	<0.07	2.73	1500	1200	800	133	1016	0.880	1.07	0.30	336.6	91.1	32.9	45.0	7.6	2.25		
35		36.00	reddish brown and black porous limonitized iron-oxide vein, black part : manganese ?	S	-	-	V	BRL-1-15	(2.40)	<0.07	4.51	3000	1900	1000	123	964	0.580	0.98	0.32	351.1	100.7	35.7	48.7	9.0	1.88		
		38.40	brownish grey strongly weathered gneiss with sporadic iron-oxide veinlets	S	-	-	C	BRL-1-16	(3.00)	<0.07	3.87	1450	480	800	99	889	0.840	1.09	0.26	309.2	88.1	32.4	38.3	7.8	2.19		
40		41.40	brownish grey hard compact siliceous iron-oxide, (core recovery very poor)	S	-	-	V	BRL-1-17	(3.00)	<0.07	1.83	3000	73	880	62	628	0.650	0.92	0.23	241.9	62.9	23.1	42.7	6.8	1.80		
45		44.40	pale grey porous weathered gneiss	S	-	-	C																				
		46.10	orange brown amorphous iron-oxide - silica mineral vein	S	-	-	V	BRL-1-18	(3.10)	<0.07	1.67	400	285	345	15	1071	0.170	0.35	0.16	265.3	67.4	18.0	21.0	4.0	0.68		
		49.20	orange brown granulated gneiss	S	-	-	C																				
50		50.00																									

PL.2-1 GEOLOGICAL LOG OF DIAMOND DRILLING HOLE, BRL-1-(I)

DDH No. BRL-1  
50-100m

LOCATION { X : E740.860  
(UTM GRID) Y : N9,979.271  
ELEVATION : 1,373.0m

BEARING :  
INCLINATION : -90°  
LENGTH : 200.10m

DEPTH (m)	GEOLOGIC COLUMN	BOUNDARY DEPTH (m) and CORE ANGLE (°)	GEOLOGICAL DESCRIPTION	WEATHERING	REACTION to HCl	MAGNETIC TEST	VEIN	POSITION of TESTED SAMPLES	ANALYTICAL RESULTS														COMBINED La, Ce and Nd CONTENTS (%)	CORE RECOVERY (%)	DEPTH (m)				
									SAMPLE No.	DEPTH and WIDTH (m)	Au (g/t)	Ba (%)	Sr (ppm)	Nb (ppm)	Y (ppm)	U (ppm)	Th (ppm)	La (%)	Ce (%)	Nd (%)	Sm (ppm)	Eu (ppm)				Tb (ppm)	Yb (ppm)	Lu (ppm)	
50			orange brown, strongly weathered granulated gneiss	S	-	-	C		BRL-1-19	(4.80)	<0.07	3.83	1250	730	730	4	1080	0.670	1.06	0.25	245.9	72.0	26.2	33.0	5.9	1.98		50	
		52.30	brown strongly weathered porous rock, fragmental core	S	-	-	C																						
		54.00	brown strongly weathered porous rock with fragments of green noncalcareous rock, dark grey and black iron-oxide veinlets developed,	S	-	-	C		BRL-1-20	(6.10)	<0.07	3.19	2100	1400	860	6	1457	0.630	0.94	0.30	380.3	111.9	35.4	29.6	4.5	1.87			
		60.10	brown, dark grey and reddish brown, variously coloured, strongly weathered porous rock, limonitized iron-oxide irregularly developed,	S	-	-	C		BRL-1-21	(5.55)	<0.07	4.24	1300	1050	880	9	1451	0.760	0.93	0.35	444.6	123.2	41.2	41.2	5.5	2.04			
		65.65	pale brown medium-grained carbonatite (massive to banded)	M	+	-	R		BRL-1-22	(1.75)	<0.07	3.47	1150	910	750	7	981	0.580	0.75	0.25	360.2	110.5	39.4	34.1	3.9	1.58			
		67.40	brown iron-oxide ore, partly calcareous (ferro-carbonatite)	M	±	-	V	←68.10m	BRL-1-23	(1.20)	<0.07	2.07	700	540	420	4	1020	0.240	0.51	0.24	368.7	88.6	24.3	22.6	2.7	0.99			
		68.60	greyish brown, banded, medium-grained carbonatite with limonitized magnetite bands and spots	M	+	-	R	BRL-1-A (WA, T, E)	BRL-1-24	(3.20)	<0.07	3.35	1350	1650	780	6	1208	0.480	0.68	0.27	494.0	137.4	40.9	38.2	4.9	1.43			
		71.80	brown limonitized iron-oxide (vein part)	M	-	-	V		BRL-1-25	(0.95)	<0.07	3.48	950	460	840	5	1028	0.230	0.45	0.27	381.9	98.2	32.0	35.1	3.9	0.95			
		72.75	brownish grey, banded, medium-grained carbonatite, with minor greenish grey bands	M	+	-	R	(WA, T) BRL-1-B (←74.10m)	BRL-1-26	(2.10)	<0.07	4.79		660	580	8	1054	0.680	1.17	0.43	407.4	101.2	31.0	38.7	4.4	2.28			
		74.95	black (manganese ?) iron-oxide vein	M	-	-	V																						
		75.00	pale grey, weakly ferric-oxide stained, medium-grained banded carbonatite	M	+	-	R		BRL-1-27	(2.60)	<0.07	4.93	2200	295	590	6	672	1.500	1.50	0.31	238.3	65.2	22.9	27.3	3.4	3.31			
		77.60	grey fresh, medium-grained carbonatite	M	+	+	R																						
		78.40	beige very fine-grained alvikite dike (later stage)	W	+	-	V		BRL-1-28	(2.80)	<0.07	2.68	1500	420	660	3	912	0.500	0.85	0.29	396.6	109.7	32.9	38.0	4.6	1.64			
		78.80	pale grey medium-grained magnetite band rich carbon-tite	W	+	+	R																						
		80.40	pale grey to white medium-grained banded carbonatite	W	+	+	R																						
		84.30	pale grey coarse-grained carbonatite, magnetite band rich	W	+	+	R																						
		84.50	pale grey to white medium-grained carbonatite	W	+	+	R	←85.40m BRL-1-C (WA, T)	BRL-1-29	×85.40	<0.07	0.48	2900	370	340	1	258	0.110	0.19	0.05	83.3	23.5	11.2	22.2	3.5	0.35			
		87.10	white, magnetite poor, medium-grained carbonatite	W	+	+	R																						
		87.80	grey, medium-grained magnetite rich carbonatite	W	+	+	R																						
		89.30	pale grey to white, banded, magnetite rich medium-grained carbonatite with dissemination of fluorite beige alvikite veinlets developed	W	+	+	R																						
		92.80	beige very fine-grained alvikite (dike swarm)	W	+	+	R																						
		93.40	pale grey to white, medium to coarse-grained carbon-tite, magnetite band weakly developed, veige alvikite (later-stage) veinlet developed	W	+	+	R																						
		98.30	white coarse-grained carbonatite (sovitic)	F	+	+	R																						
100																													

PL.2-2 GEOLOGICAL LOG OF DIAMOND DRILLING HOLE, BRL-1-(2)









DDH No. BR-2

LOCATION { X : E 740.860  
(UTM GRID) Y : N 9,979.395  
ELEVATION : 1,372.5 m

BEARING :  
INCLINATION : -90°  
LENGTH : 50.10 m

DEPTH (m)	GEOLOGIC COLUMN	BOUNDARY DEPTH(m) and CORE ANGLE (°)	GEOLOGICAL DESCRIPTION	WEATHERING	REACTION to HCl	MAGNETIC TEST	VEIN	POSITION of TESTED SAMPLES	ANALYTICAL RESULTS														COMBINED La, Ce and Nd CONTENTS (%)	CORE RECOVERY %	DEPTH (m)				
									SAMPLE No.	DEPTH and WIDTH (m)	Au (g/t)	Ba (%)	Sr (ppm)	Nb (ppm)	Y (ppm)	U (ppm)	Th (ppm)	La (%)	Ce (%)	Nd (%)	Sm (ppm)	Eu (ppm)				Tb (ppm)	Yb (ppm)	Lu (ppm)	
0			brown strongly weathered earthy rock, some part silty, some part fragmental, fragments of siliceous vein and limonitized iron-oxide vein visible, original rock : gneiss	S	-	-	C		BR-2-01	0.00 (6.40)	<0.07	5.35	1900	1550	850	4	981	1.240	1.21	0.32	327.7	96.8	33.2	43.0	7.6	2.64		0	
5		6.40 7.10	pale grey to white argillized (feldspar) weathered gneiss	S	-	-	C		BR-2-02	6.40 (6.70) 7.10	0.07	4.32	3100	1050	830	6	758	0.480	0.81	0.20	283.0	85.4	28.1	37.6	6.6	1.70		5	
10		10.50	Orange brown porous leached rock with relict of iron-oxide veinlets	S	-	-	C		BR-2-03	10.50 (3.40)	<0.07	1.04	375	990	220	18	333	0.710	0.30	0.08	103.8	26.9	8.4	8.1	1.7	0.59		10	
15		13.40 15.05	pale grey to white argillized rock, original : fine to medium-grained holocrystalline rock?				R			13.40																			
20		18.30 19.80 20.15	dark grey compact siliceous rock (ferric oxide stain), 17.60-18.30 m: strongly veined by limonitized iron- oxide	M	-	+	A		BR-2-05	18.30 (3.25)	<0.07	2.68	2850	690	790	86	1017	0.690	1.06	0.25	308.2	85.2	28.6	29.9	5.2	2.22		20	
25		22.50 24.90 26.20	dark grey sandy material (slime like), some part clayey, some part fragmental material mainly composed of iron-oxide grain and siliceous particle, 19.80-20.15: iron oxide rich weathered rock	S	-	-	A		BR-2-06	22.50 (4.20)	<0.07	4.20	1900	1000	870	98	1024	0.210	0.75	0.18	286.8	91.5	36.2	44.2	6.7	1.57		25	
30		22.50	pale grey to white, argillized and granulated gneiss	S	-	-	R		BR-2-07	22.50 (3.70)	<0.07	3.36	2850	500	740	79	864	0.870	0.75	0.20	284.4	91.7	35.8	36.7	6.1	1.55		30	
35		24.90 26.20	greyish brown limonitized iron-oxide rich rock, possi- bility of ferro-carbonatite	S	-	-	A			26.20																			
40		26.20	dark grey fine sandy material (slime-like) composed mainly of angular grains of iron-oxide, partly of magnetite grains, small amount of quartz grain.	S	-	±	?		BR-2-08	26.20 (3.80)	<0.07	5.74	1550	780	690	96	749	0.910	0.68	0.15	219.6	73.7	33.1	34.3	5.7	1.36		35	
45		30.00 30.50	Orange brown fragments may be vein part of iron-oxide, dark grey fine fragmental core composed of limonitized iron oxide, magnetite particle and porous siliceous rock (gneiss)	S	-	±	A		BR-2-09	30.00 (3.00)	<0.07	4.30	2050	1450	810	185	1453	0.640	1.01	0.27	442.9	132.9	43.7	31.8	5.4	2.27		40	
50		33.00	orange brown fragmental core, same as above, may be strongly network-veined gneiss	S	-	±	A		BR-2-10	33.00 (2.80)	<0.07	3.55	2850	1850	840	72	1283	0.600	0.96	0.23	375.6	121.6	42.2	35.0	6.2	2.09		45	
55		35.80	dark grey to dark brownish grey earthy to fragmental core may be strongly network-veined gneiss	M	-	-	A		BR-2-11	35.80 (5.80)	0.07	4.36	2150	1250	850	126	1133	0.530	1.07	0.25	386.0	125.7	44.1	36.3	6.1	2.41		50	
60		41.60 42.40	orange brown porous (weathered) gossan like material same as above, but fine fragmental core	M	-	±	V		BR-2-12	41.60 (3.20)	<0.07	4.20	3850	640	630	57	717	0.990	0.90	0.18	250.8	77.0	26.7	25.4	4.6	1.99		55	
65		44.80	orange brown porous gossan like rock, fine porous network structure is remarkable,	M	-	-	A		BR-2-13	44.80 (5.30)	<0.07	2.77	4150	750	580	41	796	0.900	0.87	0.18	256.9	81.1	27.0	19.7	3.8	1.91		60	

PL. 4 GEOLOGICAL LOG OF DIAMOND DRILLING HOLE, BR-2

DDH No. BR-3

LOCATION { X: E 740.748  
(UTM GRID) { Y: N 9,979.271  
ELEVATION : 1,361.0m

BEARING :  
INCLINATION : -90°  
LENGTH : 50.40m

DEPTH (m)	GEOLOGIC COLUMN	BOUNDARY DEPTH(m) and CORE ANGLE(°)	GEOLOGICAL DESCRIPTION	WEATHERING	REACTION to HCl	MAGNETIC TEST	VEIN	POSITION of TESTED SAMPLES	SAMPLE No.	DEPTH and WIDTH (m)	ANALYTICAL RESULTS														COMBINED La, Ce and Nd CONTENTS (%)	CORE RECOVERY (%)	DEPTH (m)	
											Au (g/t)	Ba (%)	Sr (ppm)	Nb (ppm)	Y (ppm)	U (ppm)	Th (ppm)	La (%)	Ce (%)	Nd (%)	Sm (ppm)	Eu (ppm)	Tb (ppm)	Yb (ppm)				Lu (ppm)
0			brown strongly weathered earthy rock	S	-	-																						
5		3.90	orange brown strongly weathered gneiss with black fine veinlets (manganese ?)	S	-	-	C		BR-3-01	3.90 (4.50)	0.07	5.59	1350	980	680	5	1093	0.310	0.62	0.25	260.2	71.0	25.8	33.2	4.7	1.18		
		6.35	reddish brown ferric oxide vein rich gneiss	S	-	-	A																					
		7.30	orange brown and black veinlet rich gneiss	S	-	-	A																					
10		8.40	dark grey to black stained strongly weathered gneiss, may be due to weathering of iron-manganese oxide vein	S	-	-	A	8.50m BR-3-A (WA, P)	BR-3-02	8.40 (6.40)	<0.07	7.57	500	990	600	3	1199	0.370	0.78	0.34	277.5	73.4	26.1	30.0	4.2	1.49		
		12.00	orange brown stained gneiss	S	-	-	C																					
		13.00	dark grey to black stained strongly weathered gneiss	S	-	-	C																					
15		14.80	white and orange siliceous vein	S	-	-	C																					
		15.60	orange brown stained, strongly weathered gneiss	S	-	-	A		BR-3-03	15.60 (15.60)	<0.07	6.44	1400	1400	900	15	1099	0.980	1.32	0.35	258.1	74.5	30.8	42.5	6.9	2.65		
		16.40	orange brown stained, strongly weathered gneiss	S	-	-	C																					
20		20.40	dark reddish brown limonitized iron oxide vein	S	-	-	A		BR-3-04	20.40 (0.45)	<0.07	2.99	1000	255	370	6	774	0.180	0.47	0.17	190.0	48.3	16.8	15.3	2.3	0.82		
		20.85	orange brown strongly limonitized rocks (gneiss ?), Orange brown veinlets are abundant.	S	-	-	A		BR-3-05	20.85 (19.35)	<0.07	5.90	1250	1100	860	2	1068	0.580	0.84	0.24	272.3	84.9	36.9	40.2	5.7	1.66		
25				S	-	-	A																					
30		30.20	orange brown limonitized iron-oxide vein rich gneiss, Fluorite dissemination along vein are visible.	S	-	-	A		BR-3-06	30.20 (6.05)	<0.07	5.23	1300	610	820	<3	1051	0.530	0.77	0.25	316.8	78.7	34.6	44.2	6.3	1.55		
35		33.50	orange brown strongly weathered rock (gneiss). Some green chloritized gneiss remains as relict.	S	-	-	C																					
		36.25	brown to orange brown brecciated gneiss with abundant fine veinlets of limonitized iron-oxide	S	-	-	A																					
		38.80	red hematite veinlet	S	-	-	V		BR-3-07	38.80 (5.20)	<0.07	9.44	1050	980	1050	8	1291	0.750	1.06	0.35	375.0	108.1	52.3	52.2	6.9	2.16		
40		39.00		S	-	-	A																					
		41.45	orange brown strongly weathered gneiss rich in veinlets	S	-	-	A																					
		41.80		S	-	-	A																					
45		43.00	brown, partly orange brown strongly weathered brecciated gneiss	S	-	-	A		BR-3-08	43.00 (4.56)	0.07	5.27	1150	1750	740	6	1349	0.820	1.01	0.28	388.4	105.3	40.2	36.3	5.6	2.11		
		46.00	Relict fragments of white and green gneisses are visible. Moderate film veinlets of limonitized iron-oxide	S	-	-	C		BR-3-09	46.00 (4.40)	<0.07	8.57	2000	1150	1250	8	1415	0.990	1.30	0.34	339.3	97.4	49.7	58.5	8.9	2.63		
50		50.40																										

PL.5 GEOLOGICAL LOG OF DIAMOND DRILLING HOLE, BR-3

DDH No. BR-4

LOCATION { X: E 740.978  
(UTM GRID) Y: N 9,979.395  
ELEVATION : 1,346.0m

BEARING :  
INCLINATION : -90°  
LENGTH : 50.50m

DEPTH (m)	GEOLOGIC COLUMN	BOUNDARY DEPTH(m) and CORE ANGLE (°)	GEOLOGICAL DESCRIPTION	WEATHERING	REACTION to HCl	MAGNETIC TEST	VEIN	POSITION of TESTED SAMPLES	ANALYTICAL RESULTS														COMBINED La, Ce and Nd CONTENTS (%)	CORE RECOVERY	DEPTH (m)			
									SAMPLE No.	DEPTH and WIDTH (m)	Au (g/t)	Ba (%)	Sr (ppm)	Nb (ppm)	Y (ppm)	U (ppm)	Th (ppm)	La (%)	Ce (%)	Nd (%)	Sm (ppm)	Eu (ppm)				Tb (ppm)	Yb (ppm)	Lu (ppm)
0		0.70	orange brown weathered earthy rock	S	-	-	-		BR-4-01	0.70 (1.30)	<0.07	12.60	2100	275	370	<3	219	0.320	0.33	0.08	71.5	19.5	8.8	15.9	1.9	0.73		0
		2.00	dark grey very fine-grained siliceous rock (dike)	M	-	-	R																					
		3.60	brownish grey strongly weathered earthy rock with magnetite fragments	S	-	+	C																					
5		3.60	dark grey very fine-grained iron oxide-silica mineral rock	M	-	-	R		BR-4-02	3.60 (1.80)	0.07	4.90	1050	1150	500	<3	466	0.550	0.82	0.24	198.7	43.8	15.7	23.4	3.3	1.61		
		5.40	grey, partly orange brown porous rock, strongly limonitized	S	-	-	A		BR-4-03	5.40 (4.20)	<0.07	5.21	2800	1250	700	<2	757	0.680	0.80	0.25	265.7	58.0	21.9	35.0	4.7	1.73		
		8.10	brown weathered earthy rock with magnetite grains	S	-	+	C																					
10		9.60	dark grey very fine-grained iron oxide-silica rock (dike)	M	-	-	R	10.40m BR-4-A (WA, P)	BR-4-04	9.60 (1.70)	<0.07	1.29	550	205	330	1	450	0.210	0.47	0.21	212.0	37.8	10.9	16.1	2.4	0.89		
		11.30	dark brown porous weathered gneiss intruded by abundant dark grey very fine-grained iron oxide-silica veins	S	-	-	A		BR-4-05	11.30 (3.70)	<0.07	2.71	4050	1500	1200	<3	839	0.650	0.89	0.24	319.6	77.1	31.8	51.9	7.1	1.78		
15		15.00	dark grey very fine-grained compact iron oxide-silica vein	M	-	-	-																					
		15.55	light grey and partly grey siliceous hard compact rock (vein or dike)	M	-	-	R	17.00m BR-4-B (WA, P)	BR-4-05	15.00 (3.80)	<0.07	2.29	850	1250	600	<3	767	0.620	0.70	0.19	277.5	69.5	24.3	23.7	3.4	1.51		
		18.50	orange brown limonitized very fine-grained iron-oxide vein	S	-	-	A																					
20		18.80	dark grey very fine-grained hard siliceous iron-oxide rock with rosy porous part	M	-	-	R		BR-4-07	18.80 (4.70)	<0.07	1.65	1000	420	420	2	868	0.410	0.59	0.19	277.2	61.6	19.9	18.5	3.1	1.19		
		23.50	dark brownish grey porous magnetite rich rock (original rock : ferro-carbonatite ?)	S	-	+	A		BR-4-08	23.50 (3.50)	<0.07	4.83	1050	840	610	<16	778	0.610	1.12	0.37	306.5	72.2	21.9	28.1	3.6	2.10		
25		27.00	orange brown, limonitized very fine-grained iron-oxide ore (vein), magnetic, possibly oxidized products of ferro-carbonatite	S	-	+	A		BR-4-09	27.00 (6.10)	<0.07	2.78	1650	700	1050	<2	945	0.520	0.89	0.29	309.4	81.6	26.3	40.4	5.8	1.70		
30		33.10	dark grey to black gneiss stained by ferric oxide	S	-	-	V																					
35		34.90	grey to white, occasionally orange brown gneiss, weakly veined by limonitized iron-oxide	S	-	-	C																					
40		40.50	brown weathered porous gneiss	M	+	-	-																					
		40.70		M	-	-	C																					
		42.20	pale brown and white, parti-coloured heterogeneous medium to coarse-grained carbonatite (sovitic), locally banded, locally ferrous part (ferro-carbonatite)	M	+	+	C	45.20m BR-4-C (WA, T)	BR-4-10	42.20 (3.80)	<0.07	2.74	3200	530	730	2	568	0.470	0.59	0.15	182.5	59.5	25.9	42.2	5.7	1.21		
45		46.00		M	+	+	C		BR-4-11	46.00 (4.50)	<0.07	3.56	3150	390	430	2	496	1.240	1.22	0.23	172.0	49.9	16.6	15.6	3.1	2.69		
50		50.50																										

PL.6 GEOLOGICAL LOG OF DIAMOND DRILLING HOLE, BR-4

DDH No. BR-5

LOCATION { X : E 740.758  
(UTM GRID) { Y : N 9,979.406  
ELEVATION : 1,366.0 m

BEARING :  
INCLINATION : -90°  
LENGTH : 50.30 m

DEPTH (m)	GEOLOGIC COLUMN	BOUNDARY DEPTH(m) and CORE ANGLE (°)	GEOLOGICAL DESCRIPTION	WEATHERING	REACTION to H <sub>2</sub> O	MAGNETIC TEST	VEIN	POSITION of TESTED SAMPLES	ANALYTICAL RESULTS														COMBINED La, Ce and Nd CONTENTS (%)	CORE RECOVERY (%)	DEPTH (m)						
									SAMPLE No.	DEPTH and WIDTH (m)	Au (g/t)	Ba (%)	Sr (ppm)	Nb (ppm)	Y (ppm)	U (ppm)	Th (ppm)	La (%)	Ce (%)	Nd (%)	Sm (ppm)	Eu (ppm)				Tb (ppm)	Yb (ppm)	Lu (ppm)			
0		1.50	strongly weathered gneiss or reddish brown soil	S	-	-			BR-5-01	0.00 (3.80)	<0.07	3.21	1600	770	660	2	902	0.410	0.77	0.29	286.1	83.0	31.2	26.5	3.3	1.47		0			
		3.80	purple brown earthy to fragmental rock with grey siliceous fragments and green gneiss relict	S	-	-																									
5		4.70	strongly weathered chloritized gneiss	S	-	-	C																								
		7.00	grey to dark grey weathered porous gneiss, stained by ferric oxide	S	-	-	C																								
		8.80	strongly weathered pale green gneiss with siliceous iron-oxide veins	S	-	-	A																								
10		10.00	brown gneiss, strongly replaced by silica minerals	S	-	-	A																								
		13.50	dark grey ferruginous (stained by ferric oxide), partly porous, partly compact rock, silica replacement dominant (original rock : gneiss ?)	S	-	-	V																								
		14.50	brown siliceous compact rock	M	-	-	V																								
15		15.80	dark grey silicified rock, compact to porous	S	-	-	V	14.80m BR-5-A (WA)																							
		18.90	pale brown strongly weathered gneiss, rich in chlorite after amphibole	S	-	-	R																								
		20.70	orange brown limonitized iron-oxide veinletted rock	S	-	-	A																								
20		21.90	brown weathered gneiss with abundant spots and patches of ferric oxides	S	-	-	V																								
		23.50		S	-	-	A																								
		25.40	pale greenish grey weathered gneiss. Spots, patches and stain of ferric oxide are dominant.	S	-	-	C																								
25		26.60	brown very fine-grained compact silicified rock	M	-	-	V																								
		27.80	brown stained, brecciated gneiss	S	-	-	C																								
		29.80	dark brown hard siliceous rock (massive quartz vein), stained by ferric oxide (hematite)	M	-	-	V																								
30		31.50	brown hard siliceous rock (amorphous silica vein),	M	-	-	V																								
		35.30	brown hard siliceous breccia, small breccia of gneiss (max. 2 cm, usually less than 1 cm) dominant,	M	-	-	V	31.90m BR-5-B (WA, P)																							
35		37.40	brown strongly weathered brecciated gneiss	M	-	-	R																								
		39.20	brown strongly weathered earthy gneiss	M	-	-	R																								
40		46.60	brown strongly weathered fine-grained amphibole gneiss, some amphibole altered to chlorite, Sporadic limonitized iron-oxides and black spots	M	-	-	C																								
45		49.90	silicified brecciated gneiss, Silica mineral occurs as matrix of breccia or amorphous bands.	M	-	-	A																								
50		50.40	dark brown siliceous iron-oxide vein	M	-	-	V	50.30m BR-5-C																							

PL.7 GEOLOGICAL LOG OF DIAMOND DRILLING HOLE, BR-5

DDH No. BR-6

LOCATION { X : E 740.868  
(UTM GRID) Y : N 9,979.515  
ELEVATION : 1,349.0m

BEARING :  
INCLINATION : -90°  
LENGTH : 50.10m

DEPTH (m)	GEOLOGIC COLUMN	BOUNDARY DEPTH(m) and CORE ANGLE (°)	GEOLOGICAL DESCRIPTION	WEATHERING	REACTION TO HCl	MAGNETIC TEST	VEIN	POSITION of TESTED SAMPLES	SAMPLE No.	DEPTH and WIDTH (m)	ANALYTICAL RESULTS														COMBINED La, Cu and Nd CONTENTS (%)	CORE RECOVERY %	DEPTH (m)			
											Au (g/t)	Ba (%)	Sr (ppm)	Nb (ppm)	Y (ppm)	U (ppm)	Th (ppm)	La (%)	Ce (%)	Nd (%)	Sm (ppm)	Eu (ppm)	Tb (ppm)	Yb (ppm)				Lu (ppm)		
0			reddish brown decomposed earthy rock	S	-	-			BR-6-01	0.00 (2.90)	<0.07	3.90	1450	930	810	7	551	0.700	0.72	0.18	232.6	79.2	36.2	39.9	4.9	1.60		0		
1.80			greynish brown decomposed earthy rock	S	-	-																								
2.90			greenish grey decomposed fragmental to earthy rock original rock : chloritized gneiss some part : orange brown (vein)	S	-	-																								
5			reddish brown to purple brown strongly veinletted rock original rock : green gneiss	S	-	-	F		BR-6-02	5.60 (3.00)	<0.07	4.19	500	840	530	18	520	0.350	0.45	0.15	207.1	64.3	26.5	21.1	2.3	0.95				
5.60			purple red to black, limonitized iron-oxide ore	S	-	-	V	-10.50m BR-6-A (WA, P)	BR-6-03	8.60 (4.60)	<0.07	2.18	1700	305	700	26	690	0.670	1.15	0.33	230.6	53.7	19.3	17.8	3.6	2.15				
8.60			grey strongly weathered earthy rock, stained orange brown by oxidation of vein original rock : green gneiss	S	-	-	C																							
13.20			strongly limonitized rock stained orange brown to black	S	-	-	A		BR-6-04	16.30 (1.00) 17.30	<0.07	7.38	2200	270	860	80	780	0.350	0.52	0.21	237.4	72.8	29.9	32.6	4.6	1.08				
16.30			brown limonitized iron-oxide vein	S	-	-	V	-18.90m BR-6-B																						
17.30			greenish grey, strongly weathered earthy gneiss moderately veinletted	S	-	-	C																							
18.70			greenish grey sheared gneiss with quartzose gneiss breccia	S	-	-	C																							
19.00			orange brown to black porous gossan-like ore	S	-	-	V		BR-6-05	23.90 (1.40) 25.30	<0.07	12.00	2550	475	740	143	580	2.120	1.98	0.41	233.1	59.9	20.6	26.2	4.7	4.51				
22.60			dark grey, grey and reddish brown, siliceous compact iron-oxide rock with small amount of breccias of gneiss	M	-	-	V		BR-6-06	29.20 (3.90)	<0.07	5.11	2400	1250	670	114	655	1.390	1.63	0.35	243.6	54.9	17.2	28.6	4.3	3.37				
23.90			orange brown siliceous iron-oxide rock	M	-	-	V		BR-6-07	29.20 (2.40)	<0.07	5.19	2800	630	570	99	487	1.080	1.31	0.30	202.7	49.5	21.0	27.4	4.2	2.69				
25			purplish grey very fine-grained compact iron-oxide ore	M	-	-	V	-30.80m BR-6-C (WA, P)																						
25.30			pale grey quartzose gneiss	M	-	-	C																							
29.20			dark brown partly orange brown siliceous iron-oxide ore	M	-	-	V		BR-6-08	32.50 (5.00)	<0.07	6.35	1950	810	650	49	994	1.110	1.56	0.46	346.8	80.5	22.5	27.7	4.8	3.13				
30			reddish brown to black porous gossan-like ore, strongly limonitized	S	-	-	V																							
30.50			brownish grey, weathered chlorite bearing gneiss	M	-	-	C																							
31.60			grey compact, hard silica-iron oxide ore	M	-	-	V																							
32.50			orange brown limonitized iron-oxide ore	S	-	-	V		BR-6-09	37.50 (3.80)	<0.07	4.58	2000	310	730	20	719	0.960	1.52	0.44	293.7	61.6	14.1	38.3	5.8	2.92				
35			brown to dark brown, partly grey, compact siliceous iron-oxide	M	-	-	V		BR-6-10	39.30 (3.20)	<0.07	6.43	1900	140	550	37	537	0.580	1.00	0.31	221.2	51.0	15.6	28.4	4.2	1.89				
35.00			brownish grey weathered gneiss	S	-	-	C																							
37.50			grey, partly orange brown siliceous iron-oxide ore	S	-	-	V		BR-6-11	46.30 (1.90) 47.40	<0.07	5.49	2650	265	910	50	706	0.850	1.40	0.42	290.1	69.2	23.2	45.7	6.4	2.67				
39.30			brown weathered gneiss	S	-	-	C																							
40.60																														
43.10																														
45																														
46.30																														
47.40																														
49.30																														
50																														
50.10																														

PL. 8 GEOLOGICAL LOG OF DIAMOND DRILLING HOLE, BR-6

















DDH No. BR-14

LOCATION { X : E 740.868  
(UTM GRID) Y : N 9,979.637  
ELEVATION : 1,307.0 m

BEARING :  
INCLINATION : -90°  
LENGTH : 50.30 m

DEPTH (m)	GEOLOGIC COLUMN	BOUNDARY DEPTH(m) and CORE ANGLE (°)	GEOLOGICAL DESCRIPTION	WEATHERING	REACTION to HCl	MAGNETIC TEST	VEIN	POSITION of TESTED SAMPLES	ANALYTICAL RESULTS																COMBINED La, Ce and Nd CONTENTS (%)	CORE RECOVERY	DEPTH (m)	
									SAMPLE No.	DEPTH and WIDTH (m)	Au (g/t)	Ba (%)	Sr (ppm)	Nb (ppm)	Y (ppm)	U (ppm)	Th (ppm)	La (%)	Ce (%)	Nd (%)	Sm (ppm)	Eu (ppm)	Tb (ppm)	Yb (ppm)				Lu (ppm)
0		1.40	brown weathered earthy rock; upper 0.3 m, reddish brown	S	-	-		BR-14-01	0.00 (1.40)	<0.07	3.13	1200	620	540	7	848	0.320	0.52	0.22	259.3	63.1	21.0	31.0	4.2	1.06		0	
			pale brown to dark grey earthy gneiss, original rock : amphibole bearing gneiss	S			R	BR-14-02	(2.75)	<0.07	1.93	950	1250	560	11	526	0.430	0.48	0.12	144.5	41.9	17.0	32.3	4.7	1.03			
5		4.15	dark grey, limonitized iron-oxide vein	S			V	BR-14-03	4.15 (4.90)	<0.07	0.96	2000	46	240	3	855	0.039	0.23	0.21	300.8	61.8	14.6	7.3	1.8	0.479			
		4.90	pale grey weathered quartz-feldspathic gneiss with very minor amount of amphibole	S			R	BR-14-04	(0.35)																			
		7.80	pale grey to pale brown medium to coarse-grained magnetite rich carbonatite, 8.05-8.65 : porous iron-oxide vein	C	+	+	C	BR-14-05	(0.20) (8.05) (8.25) (8.60) (2.05) (10.65)	<0.07	1.48	2900	890	850	4	1393	0.420	1.05	0.41	394.1	91.3	31.3	24.2	3.9	1.88			
10		8.05		C	-	-	A	BR-14-06	(11.50)	<0.07	4.16	3250	460	320	12	1580	0.790	1.80	0.73	494.3	94.7	19.8	6.8	1.1	3.32			
		8.60		C	+	+	A	BR-14-07	(11.15)	<0.07	2.43	>10000	250	500	7	899	0.750	0.94	0.25	267.6	70.1	20.1	17.6	2.4	1.94			
		10.55	strongly weathered green amphibole gneiss	C	-	-	R																					
		11.50	weakly weathered greyish green amphibole gneiss, minor sporadic iron-oxide veinlets developed	C	-	-	R																					
		12.15	fresh greenish grey amphibole gneiss, amphibole : altered to chlorite, minor hair veinlets : slightly observed, intercalation : calcareous schist 2 cm in width.	W	-	-	R																					
		13.30	white fine-grained calcareous schist with green film seams and bands	W	+	-	R																					
		14.20	greenish grey, fresh, fine to medium-grained compact amphibole gneiss Hair calcite veinlets occur moderately throughout the core.																									
15		17.00		W	-	-	C																					
		21.10																										
		24.30																										
25																												
		37.50	brown stained amphibole gneiss	M	-	-	R																					
		38.00	strongly sheared, silicified amphibole gneiss, vein quartz strongly developed, minor iron-oxide veinlets	M	-	-	A	BR-14-08	38.00 (2.90)	<0.07	0.69	750	2700	1100	11	986	0.430	0.60	0.18	307.1	105.1	44.1	40.3	5.5	1.21			
40		40.90	pale grey very fine-grained calcareous schist	W	+	-	R																					
		41.90	weakly sheared, greenish grey amphibole gneiss	M	-	-	R																					
		43.10	brown stained, amphibole gneiss with moderate development of iron-oxide veinlets	M	-	-	C																					
45		46.20	pale grey to white, meta-acidic intrusive rock, quartz : granulated, feldspar : relict crystal, amphibole gneiss : xenolith-like occurrence,	W	-	-	R																					
		48.20																										
		49.50																										
50		50.00																										
		50.30																										

PL. 16 GEOLOGICAL LOG OF DIAMOND DRILLING HOLE, BR-14





DDH No. BR-16

LOCATION { X: E 740.968  
 (UTM GRID) Y: N9,979.510  
 ELEVATION : 1,318.0m

BEARING :  
 INCLINATION : -90°  
 LENGTH : 50.40 m

DEPTH (m)	GEOLOGIC COLUMN	BOUNDARY DEPTH(m) and CORE ANGLE (°)	GEOLOGICAL DESCRIPTION	WEATHERING	REACTION to HCl	MAGNETIC TEST	VEIN	POSITION of TESTED SAMPLES	ANALYTICAL RESULTS													COMBINED La, Ce and Nd CONTENTS (%)	CORE RECOVERY	DEPTH (m)																
									SAMPLE No.	DEPTH and WIDTH (m)	Au	Ba	Sr	Nb	Y	U	Th	La	Ce	Nd	Sm				Eu	Tb	Yb	Lu												
											(g/t)	(%)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(%)	(%)	(%)	(ppm)				(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)										
0			brown soil with small amount of pale greenish grey amphibole gneiss (pebbles)	S	-	-																																		
		2.30	pale greenish grey strongly weathered amphibole gneiss	S	-	-	R																																	
5		4.50	pale greenish grey fractured amphibole gneiss, with feldspar porphyroblasts (spotted) 1-2 mm in diameter, partly calcareous by calcite hair veinlets,	S	-	-	R																																	
10				M	-	-																																		
		12.90	brown limonitized iron-oxide vein	M	-	-	V		BR-16-01	(0.40)																														
		13.30																																						
		14.90	pale brown brecciated quartz-feldspathic gneiss with calcareous veinlets	M	±	-	C																																	
15		16.00	pale brown brecciated gneiss with limonitized ironoxide	M	±	-	A		BR-16-02	(1.19)																														
		16.40																																						
		16.90	brown compact siliceous iron-oxide vein	M	±	-	V		BR-16-03	(0.50)																														
		20.90	pale grey fine-grained biotite-quartz-feldsper gneiss with weak replacement by calcite veinlets	M	±	-	C																																	
20			pale grey to white fine-grained biotite-quartz-(feldsper) gneiss with abundant segregation quartz veins segregation quartz vein : 1 to 10 cm in width, some biotite concentration zones are observed due to segregation, partly calcareous by hair veinlets of calcite																																					
25																																								
30				W	+	-	C																																	
35																																								
40		39.30	pale grey fine-grained compact biotite-quartz-feldsper gneiss	W	-	-	C																																	
		40.80	black calcareous graphite rich gneiss		+	-	C																																	
		41.00		W	-	-	C																																	
45		43.60	pale grey fractured biotite-quartz-(feldsper) gneiss, segregation quartz veins moderately developed,	W	-	-	C																																	
		46.80	pale grey fine-grained biotite-quartz-(feldsper) gneiss, weakly fractured	W	-	-	C																																	
50		50.40																																						

PL. 18 GEOLOGICAL LOG OF DIAMOND DRILLING HOLE, BR-16